

# Air Pollution in Regions and Metro Areas

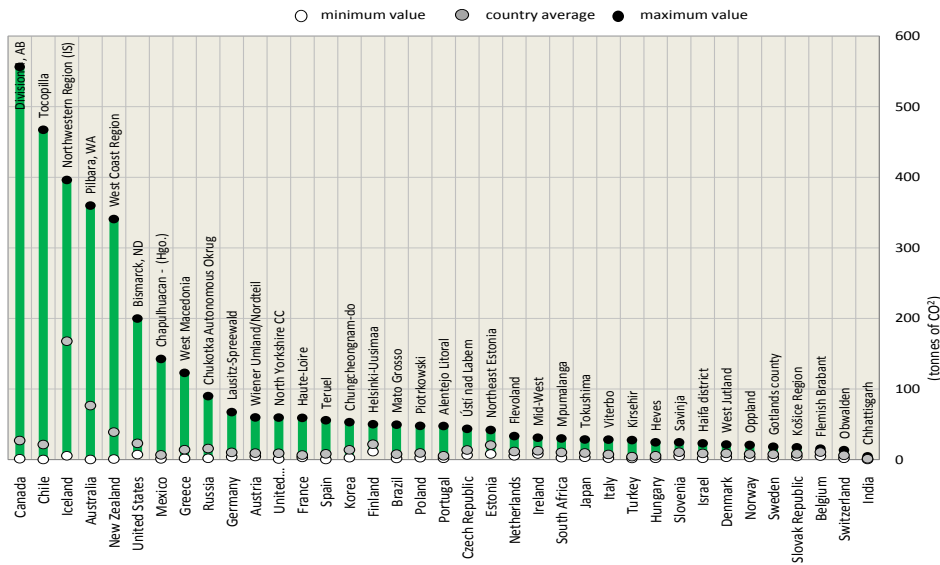
OECD Regions at a Glance 2013– The interactive edition

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Carbon dioxide (CO<sub>2</sub>) is the primary greenhouse gas emitted through human activities. While CO<sub>2</sub> occurs naturally in the atmosphere and is part of the earth's carbon cycle, man-made CO<sub>2</sub> emissions have accounted for the majority of the CO<sub>2</sub> increase in the atmosphere since the beginning of the industrialisation. Data on emissions by region must be considered in context, since the indicators are powerfully influenced by things like industrial structure and geography. Thus cities and regions with little industry may generate lower emissions but their inhabitants consume industrial goods produced elsewhere that contribute to GHG emissions.

Wide ranges in CO<sub>2</sub> emissions per capita exist among regions. The highest values of CO<sub>2</sub> per capita were registered in some regions of Australia, Canada, Chile, Greece, New Zealand and the United States, and, among non OECD countries, the Russian Federation.

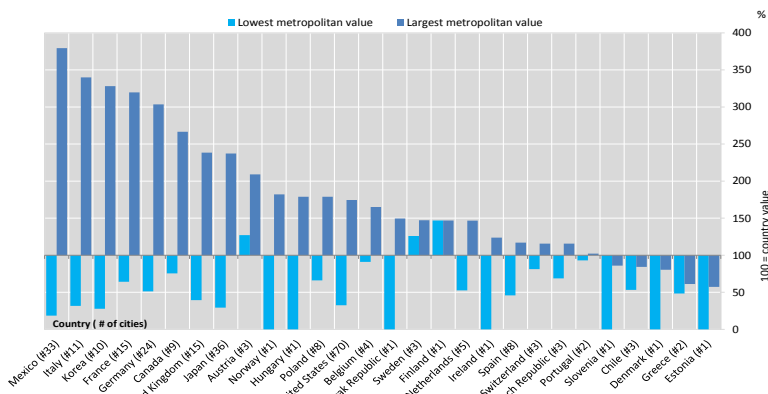
TL3 regional range in CO<sub>2</sub> emissions per capita, 2008



Source: OECD Regions at a Glance 2013

Evidence shows that the CO<sub>2</sub> emissions per capita in metropolitan areas are lower than in less densely populated regions in half of the OECD countries, where data are available. While metropolitan areas are considered large consumers of energy and producers of CO<sub>2</sub>, high differences are observable among cities both within and across countries. The metropolitan areas with the highest levels of emissions per capita are found in Canada, Korea and the United States. Within countries, the highest differences in CO<sub>2</sub> emissions per capita in metropolitan areas are observed in Italy, Korea, Mexico and France.

Metropolitan areas range in CO<sub>2</sub> emissions per capita, 2008 (country value = 100)



## Links:

- [OECD Regions at a Glance 2013](#)
- [OECD Regional Statistics and Indicators](#)
- [Regions at a Glance interactive](#)

## Definitions

**CO<sub>2</sub> regional emissions** are imputed from national emission data allocated to grids of circa 10 km x 10 km square. It includes emissions from all sources with the exception of air transport, international aviation and shipping.

**Carbon dioxide (CO<sub>2</sub>) emissions in metropolitan areas** are estimated by adjusting national emission data with population grid data and infrastructure location. They include emissions from all sources with the exception of air transport, international aviation and shipping.